

Date: Thursday, 19/04/2007 12:57:17 PM
 User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: TOW RING		
Job Number	: 31957		Part Number	: D2968041		
Estimate Number	: 10396		Drawing Number	: D2968		
P.O. Number	: N/A		Project Number	: N/A		
This Issue	: 19/04/2007	S.O. No.	: N/A	Drawing Revision	: B1	
Prsht Rev.	: NC		Material	: N/A		
First Issue	: N/A		Due Date	: 26/04/2007		
Previous Run	: 31956		Qty:	40	Um:	Each
Written By	:					
Checked & Approved By	:					
Comment/	: Est:C 03.04.11 Reformat; Incorporated D2968-1/-5 KJ/RF					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	31957A	STEM	
Comment: Sub-Component STEM D2968-1 B 30946			FC 07/04/20 (40)
2.0	31957B	RING	
Comment: Sub-Component RING D2968-5 B 302748			FC 07/04/20 (40)
3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	
Comment: LARGE FABRICATION RESOURCE 1 Weld D2968-1 & D2968-5 as per Dwg D2968 & QSI 004 using 4130 welding rod Identify as D2968-041 Batch: M 19317			FC 07/04/23 (40)
4.0	QC9	VISUAL WELDING INSPECTION	
Comment: VISUAL WELDING INSPECTION			FC 07/04/23 (40)
5.0	QC5	INSPECT WORK TO CURRENT STEP	
Comment: INSPECT WORK TO CURRENT STEP			FC 07/04/23 (40)
6.0	OUTSIDE SERV.30	OUTSIDE SERVICES-MACH	
Comment: Sub-Contracting PURCHASING Issue P/O: 3611 Description: D2968-041 to heat treat to ultimate tensile strength 125ksi as per Dwg D2968			FC 07/04/24 (40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: Date: 07/06/05
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date:
User:

Thursday, 19/04/2007 12:57:17 PM
Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TOW RING

Job Number: 31957

Part Number: D2968041

Job Number:



Seq. #: Machine Or Operation:

Description :

Conformity sheet required

Issue P/O: 36013

C 207/04/24 (40)

Cad Plate per QQ-P-416F Class I Type II

Conformity sheet required

7.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

207/07/16 (40)

8.0 QC5

INSPECT WORK TO CURRENT STEP



waited for heat treat cert
07-05-16

POWDER COATING

Comment: INSPECT CAD PLATE



207/05/23 (40)

9.0 POWDER COATING

POWDER COATING

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

DO NOT POWDER COAT THREADS

207/06/04 (40)

10.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



207/06/04 (40)

07/06/04 (40)

Comment: INSPECT POWDER COAT

11.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

207/06/04 (40)

12.0 QC21

FINAL INSPECTION/W/O RELEASE



207/06/05 (40)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



207/06/04

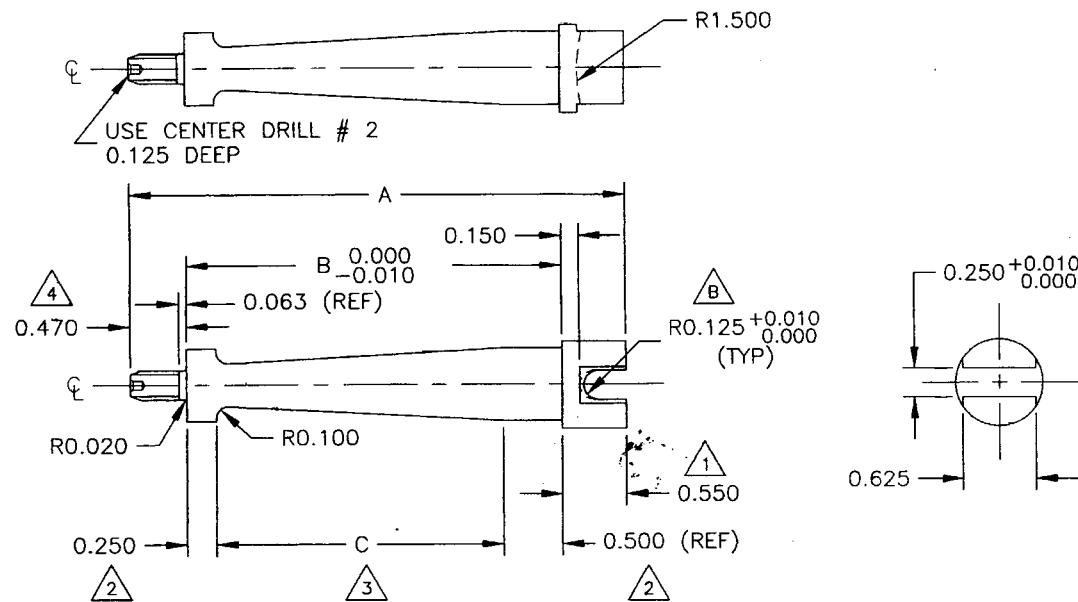
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/0 31852



PART NUMBER	A	B	C
D2968-1	5.040	4.020	3.270
D2968-3	4.200	3.180	2.430

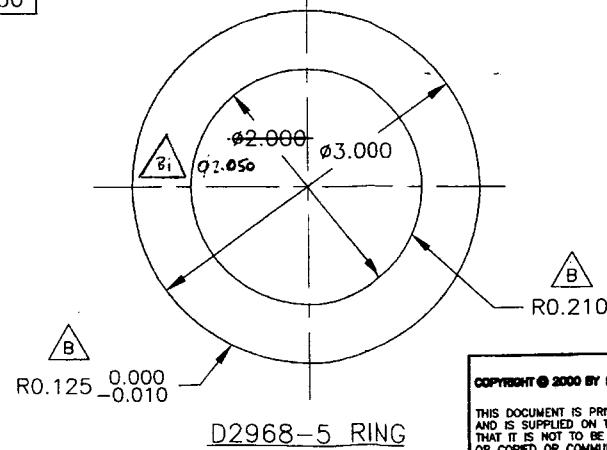
D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

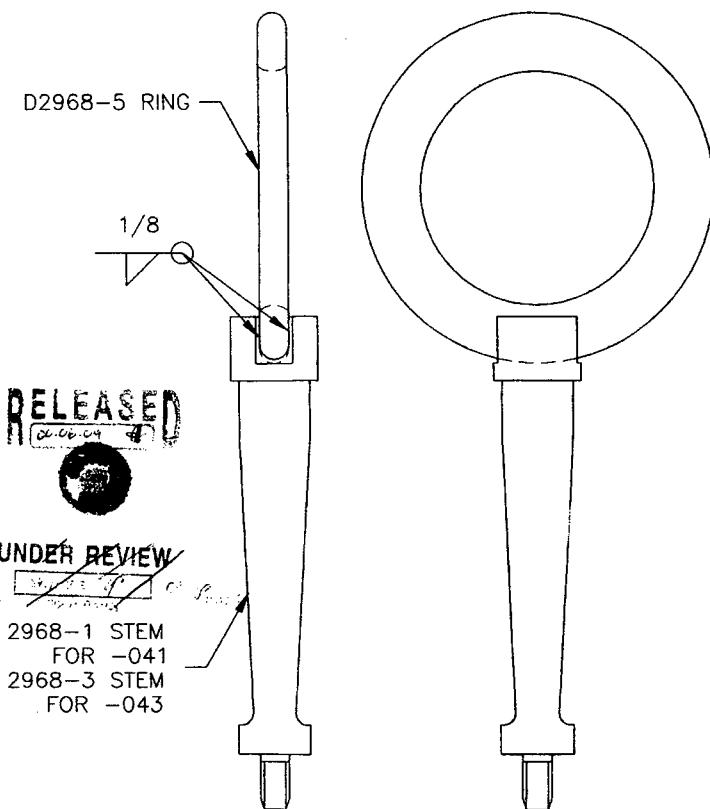
MATERIAL: AISI 4130
 △ Ø0.750 O.D.
 △ Ø0.625 O.D.
 △ MACHINE UNIFORM TAPER FROM Ø0.363 O.D.
 TO Ø0.625 O.D.
 △ 1/4-28 UNF THREAD WITH 0.063 GRIP
 MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 UNLESS OTHERWISE INDICATED
 TOLERANCES ARE PER DART QSI 018 UNLESS
 OTHERWISE NOTED

D2968-5 RING:

MATERIAL AISI 4130
 TOLERANCES ARE PER DART QSI 018 UNLESS
 OTHERWISE NOTED



D2968-5 RING



D2968-041 AND D2968-043 TOW RING:
 WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
 HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI
 FINISH: CAD PLATE ENTIRE ASSEMBLY PER
 QQ-P-416F CLASS 1 TYPE II
 POWDER COAT WHITE (REF 4.3.5.2) PER DART
 QSI 005 4.3 (EXCEPT THREADS)
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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 PERSON WITHOUT WRITTEN PERMISSION FROM
 DART AEROSPACE LTD.

B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKSBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2968 REV. B SHEET 1 OF 1
DATE	TITLE	SCALE 1:1

61 03206 2.000
61 03206 2.000

MANCO
DOMPLEX

8895 Crescent 3
Anjou (Québec) H1J 1B6
Tél.: 514-355-7867
Fax: 514-355-8750

CERTIFICAT DE CONFORMITÉ
CERTIFICATE OF COMPLIANCE

13272

DAPT Aerospace LTD

Client / Customer

103613

Votre # de commande / Your purchase order #

D2968-041-631957

de la pièce / part

103911

Notre # de bon de livraison / Our packing slip #

Inspecteur / Inspector	Renault		
Placage / Plating	QQQ-P-416 F class 1 Type II		
Quantité totale / Total quantity	40	Quantité inspectée / Inspected quantity	40
Adhésion / Adhesion	Bonnie		
Épaisseur / Thickness	L.C.D.	H.C.D.	Moy. / aver. 0.0005
Coulisses, taches / Leach, spots	non	Rugosité / Roughness	non
Quantité approuvée / Approved quantity	40	Quantité rejetée / Rejected quantity	—

Commentaires / Comments

Nous certifions que les pièces énumérées ci-dessus ont été faites en conformité avec vos dessins et spécifications et rencontrent les exigences contenues dans ces dessins et/ou spécifications.

We hereby certify that the parts listed above have been made in accordance with your drawings and specifications and are correct to the requirements contained in those drawings and/or specifications.

Signé au nom de
Signed on behalf of

MANCO
DOMPLEX



VAC AERO
INTERNATIONAL INC.

VAC AERO INT. INC.

Fax: 905-865-8303

May 23 2007 11:35am P002/002
RELEASE NOTE

GST No.: R105468102

OAK 86749-1

HEAD OFFICE
1371 SPEERS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489

2009 WYCROFT ROAD, UNIT B
OAKVILLE, ONTARIO
CANADA L6J 6J4
TEL: (905) 827-7377 FAX: (905) 827-1380

QUEBEC DIVISION
7450 RUE VÉRITÉ STREET, ST. LAURENT, QUÉBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

05/03/2007

MM / DD / YYYY

PAGE : 1

1DAR01
BILL TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

K6A 1K7

SHIP TO: MANCO DOMPLEX
4660 HICKMORE
ST. LAURENT, QC

H4T 1K2

DATE SHIPPED	SHIP VIA	F.O.B.
05/03/2007		ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
3611		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS	
					40	40
D2968-041	TOW RING	EA				
	Process Specifications:		Procedure: 4047			
	HEAT TREATED TO 125 KSI MIN.					
	100% HARDNESS TESTED PER ASTM E-18, HRC 27-32.5					
	MATERIAL: 4130					
					100% HARDNESS TESTED	
					40 pos.	
					27/28 HRC	
					OK	
					VACO TH- 25 Q.C.	

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

Dawn Leemay
Authorized Q.C. Inspector

VACO
TH-
25
Q.C.



VACUUM BRAZING - HEAT TREATING - SPECIAL PROCESSING - FURNACE EQUIPMENT
THICKENING COMPONENT OVERHAUL - PLASMA AND OTHER COATINGS



HEAT
TREATING